

SHORTER NOTES

THE SELAGINELLA APODA COMPLEX IN IOWA.—In 1958 R. F. Thorne and R. L. Hulbary discovered the only Iowa locality for specimens of the *S. apoda* (L.) Spring complex (Muscatine Co., Thorne 20171, UI). This population also represents the most northwesterly station of the *S. apoda* complex in North America. The population occurred in a seepage bog at the base of a sandy bluff. Shortly after the discovery of this *Selaginella*, the locality was ditched, drained, and placed into intensive agricultural use. The population was presumed to have been exterminated. In 1975, one of us (JHP) visited the locality and discovered that the population was still extant. Drainage and grazing had great impact on the larger vascular plants, but the prostrate *Selaginella* appeared to have been promoted by the disturbance. The population now exists as a dense ground cover and forms a strip 1–2 m wide and over 200 m long. In addition, the population, which was not fertile in 1958, was abundantly fertile in 1975–1977.

The plants originally were identified as *S. apoda* and have subsequently been so treated by Iowa workers (e.g., Peck., J.H., 1976. The pteridophyte flora of Iowa. Proc. Iowa Acad. Sci. **83**: 143–160). Recently, however, investigations by one of us (WRB) led to the description of *Selaginella eclipses* Buck as a species distinct from *S. apoda* (Buck, W. R., 1977. A new species of *Selaginella* in the *S. apoda* complex. Canad. J. Bot. **55**: 366–371). *Selaginella eclipses* is distinguished from *S. apoda* by features of the megaspore wall and by leaf morphology. *Selaginella eclipses* is found to the north and west of *S. apoda*, and occurs in an arc from Oklahoma northeast to the Great Lakes region and then northeastward along the St. Lawrence River. The Iowa population of the *S. apoda* complex was not examined during the original study of *S. eclipses*. Subsequently, Iowa specimens were examined and found to be *S. eclipses*. *Selaginella apoda* (L.) Spring is therefore excluded from the Iowa pteridophyte flora. The purpose of this note is to call attention to the importance, persistence, and identity of the Iowa population.—James H. Peck, Dept. of Biology, University of Wisconsin-La Crosse, La Crosse WI 54601 and William R. Buck, Dept. of Botany and Herbarium, University of Michigan, Ann Arbor, MI 48109.

POLYSTICHUM LONCHITIS FOUND IN THE BLACK HILLS.—A single plant of *Polystichum lonchitis* (L.) Roth was found in the Black Hills of Wyoming on September 4, 1977. The location is in Crook County, in Upper Dugout Gulch about 8 miles south of Beulah and about 1.5 miles west of the South Dakota border, at an elevation of 4800 feet. The plant was growing in a damp ravine under Paper Birch, *Betula papyrifera* Marsh., and Beaked Hazelnut, *Corylus cornuta* Marsh. The plant was vigorous and had numerous fronds, several of which were removed to be deposited at Harvard University (GH) and the University of Wyoming (RM) (Dorn 3042). The closest known localities are about 265 miles

southwest, in Carbon County, Wyoming. The species also occurs in northwest Wyoming, south-central Montana, and further west. This new locality is not unexpected since the species distribution now parallels that of several other vascular plants which jump from the Rocky Mountains, to the Black Hills, to the upper Great Lakes, and to the Gaspé area of Québec.—*Robert D. Dorn, Box 1471, Cheyenne, WY 82001.*

ON THE DISTRIBUTION OF LYCOPODIUM FLABELLIFORME IN ILLINOIS.—The Ground-pine, *Lycopodium flabelliforme* (Fern.) Blanch., was collected on 11 Oct 1976 from the northwest part of Lake Argyle State Park, McDonough County, Illinois (NE 1/4 of S36, T6N, R4W). This collection is the first report of this species in western Illinois and the fourth report of a native station for the state. It is interesting to note that the three previously reported native stations, in Pope, Ogle and Crawford Counties,¹ are on the southern, northern, and eastern perimeters of the state, and McDonough County is at the western edge. *Lycopodium flabelliforme*, therefore, may occur in interior Illinois counties as well. Three adventive stations in two other peripheral northeastern counties (Ogle and Cook) have also been reported.² The McDonough County population of *L. flabelliforme* is about 112 miles from the nearest of the two reported Iowa collections and 140 miles from the nearest Illinois location; the species has not been reported from Missouri.³

The McDonough County plants were scattered in a shaded area of about 30 ft² on a slope several feet above the lake margin. Cones were not present. The canopy trees of the collection site were *Acer saccharum* Marsh., with *Ostrya virginiana* (Mill.) K. Koch and *Ulmus rubra* Muhl. the dominant understory trees. The mesic deciduous woodland is a relatively young, secondary one. Characteristic herbaceous vascular plants included *Cystopteris fragilis* (L.) Bernh., *Adiantum pedatum* L., *Equisetum arvense* L., *Sanguinaria canadensis* L., *Hepatica acutiloba* DC., and *Dicentra cucullaria* (L.) Bernh. Mosses present were *Mnium cuspidatum* Hedw., *Brachythecium acuminatum* (Hedw.) C. F. Austin, and *Bryhnia graminicolor* (Brid.) Grout. The soil was a sandy loam over sandstone and had a pH of 6.2

A voucher specimen (*R. D. Henry 4052*) has been deposited in the Western Illinois University Herbarium (MWI) at Macomb.—*R. D. Henry and A. R. Scott, Department of Biological Sciences, Western Illinois University, Macomb, IL 61455.*

¹Phillippe, L. R. 1971. A new distribution record for *Lycopodium flabelliforme* in Illinois. *Trans. Ill. State Acad. Sci.* 64(4): 399.

²Mohlenbrock, R. H. 1967. *The Illustrated Flora of Illinois: Ferns.* Southern Illinois University Press, Carbondale, p. 31.

³Wilce, J. H. 1965. Section *Complanata* of the genus *Lycopodium*. *Nova Hedw.* 19: 142,197,200.